

THE AMERICAS

US poised for innovative ship design experiment

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Washington, DC

The US Department of Defense is preparing for an ambitious operational experiment with its largest-ever naval vessel built exclusively with carbon materials, according to US defence and industry officials.

The initiative features the M80 Stiletto, a 24.4 m-long, 12.1 m-wide vessel developed by M Ship Company of San Diego, California. The lightweight, all-carbon ship features the company's patented M-hull design. Bill Burns, the company's co-founder, told *JDW* that the hull converts wave energy into lift for the vessel. In the process, this reduces the ship's wake and allows for a fast yet smooth ride, he said.

The Office of Force Transformation (OFT)-led project aims to validate the novel hull, said officials from the organisation. Equally important will be an exploration of operational concepts for using such a vessel. For this role it would be wired with sensor and communica-

The M80 will carry one 11 m rigid hull inflatable boat and 12 US Navy SEALs

M Ship Company; 1116849



tions connectivity and positioned close to hostilities as a hub to support special operations forces with timely information, they said.

"This isn't a story actually about the boat," US Navy Commander Gregory Glaros, an OFT transformation strategist who heads the initiative, told *JDW*. "The story is about distributed operations and how we bring together the disparate sensors that exist out there into some holistic point ... so that we can prosecute our mission."

To that end, Cmdr Glaros said, the OFT is integrating an 'electronic

keel' into the ship that comprises a 1 Gbyte local area network and data storage devices. These will allow for various sensors, communications devices and even weapons to be operated readily from the ship and will also serve to fuse the information from the sensors, he said.

The Stiletto is being constructed in San Diego. The vessel is expected to be in the water in January for the start of testing, said Terry Pudas, the OFT's acting director. The experiment is expected to last two to three years. During the tests the ship will

- The US Office of Force Transformation will begin an operational experiment early in 2006 with the M80 Stiletto ship
- The 24.4 m-long, all-carbon vessel, built by M Ship, features a novel hull design and 'electronic keel'

be used in roles like mine detection, Cmdr Glaros said.

US Special Operations Command is providing the ship's operators and is a partner in the project.

A crew of three will operate the Stiletto, which will be capable of speeds greater than 50 kt. It will also carry a complement of 12 US Navy SEALs, Air and Land (SEAL) commandos and one 11 m rigid hull inflatable boat for them. The Stiletto will also host smaller sized unmanned aerial vehicles.

Cmdr Glaros said Freewing Aerial Robotics' Manta and Advanced Ceramics Research's Silver Fox unmanned aircraft will be operated from the ship during the experiment.

Another goal of the project is to increase US competency in building composite ships and to stimulate US shipyards to embrace them, the OFT officials said. ■

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